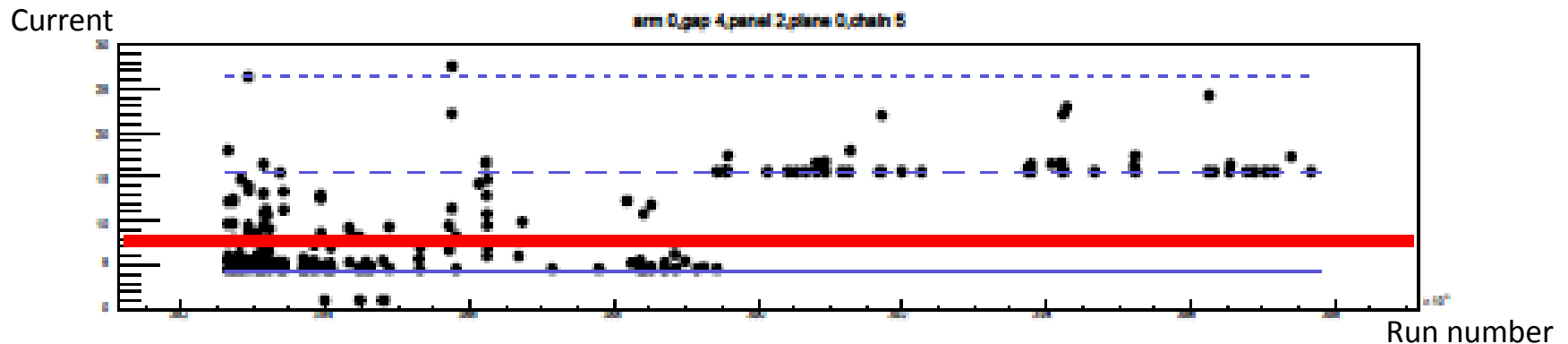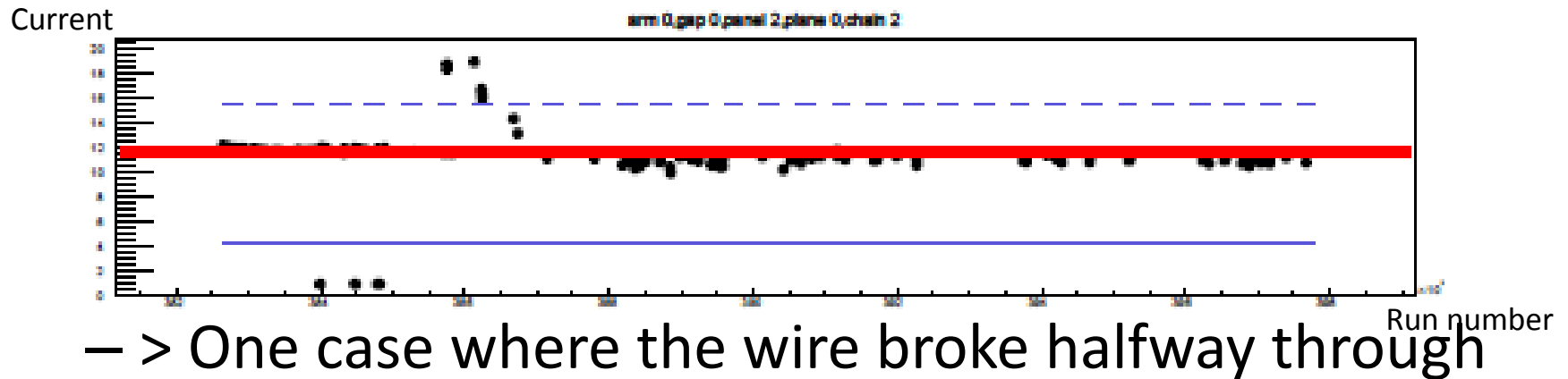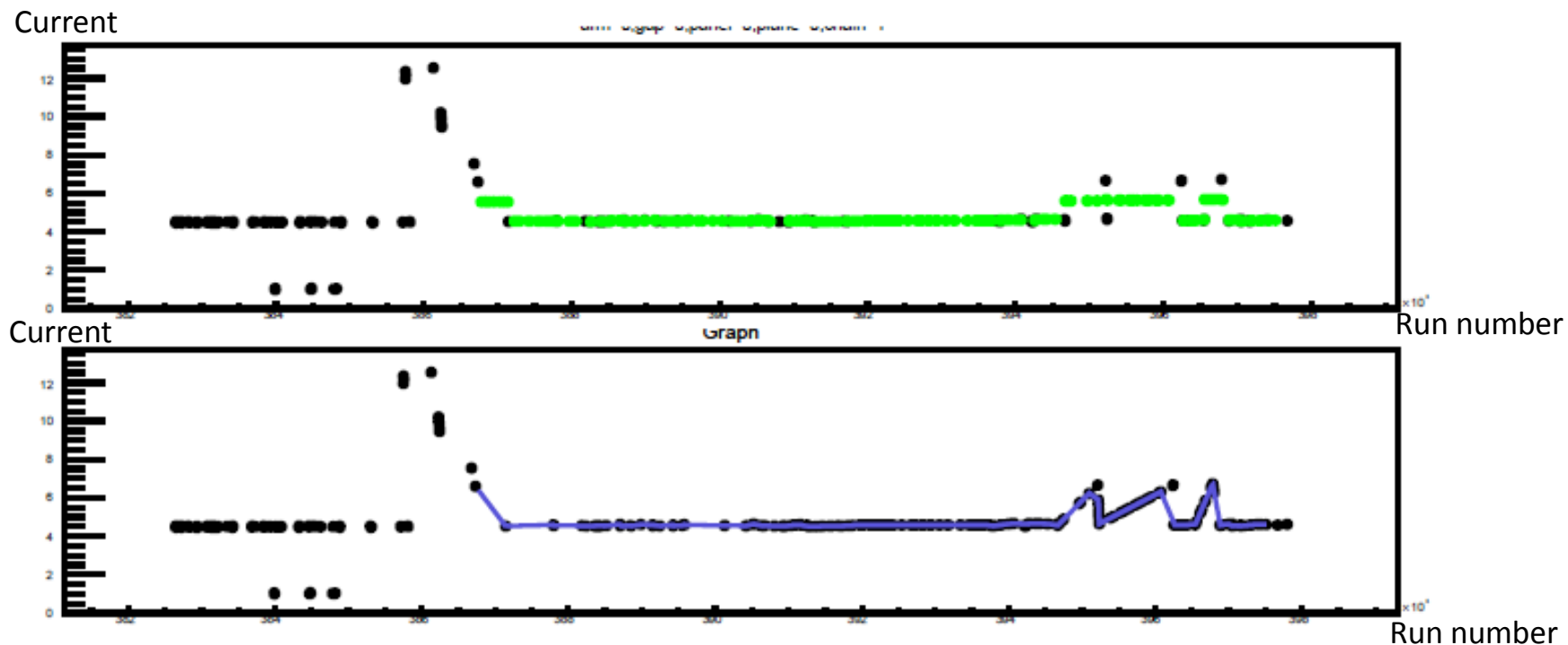# Broken Wire estimation

- Both estimations agree except for 12 cases
  - > Mostly ambiguous cases (11 out of 12)

Current

arm 0,gap 0,panel 2,plane 0,chain 2

Run number

  - > One case where the wire broke halfway through

Current

arm 0,gap 4,panel 2,plane 0,chain 5

Run number

Interpoled Baseline

- Instead of using the average (green) between two cosmic runs, used a linear interpolation (blue)

Baseline subtracted currents

- As the broken wire estimation and the interpoled baseline currents are different, new baseline currents (left) are slightly different from the old ones (right) :

386775	4.26567	1	386775	5.086
386776	4.21669	2	386776	5.032
386777	4.0077	3	386777	4.818
386825	7.37652	4	386825	7.946
386826	7.11453	5	386826	7.679

- But both methods (old one in pink and new one in black) are consistent with each other.

arm=0,gap=0,panel=0,plane=0,chain=1

Current ... Run number

Current ... Run number
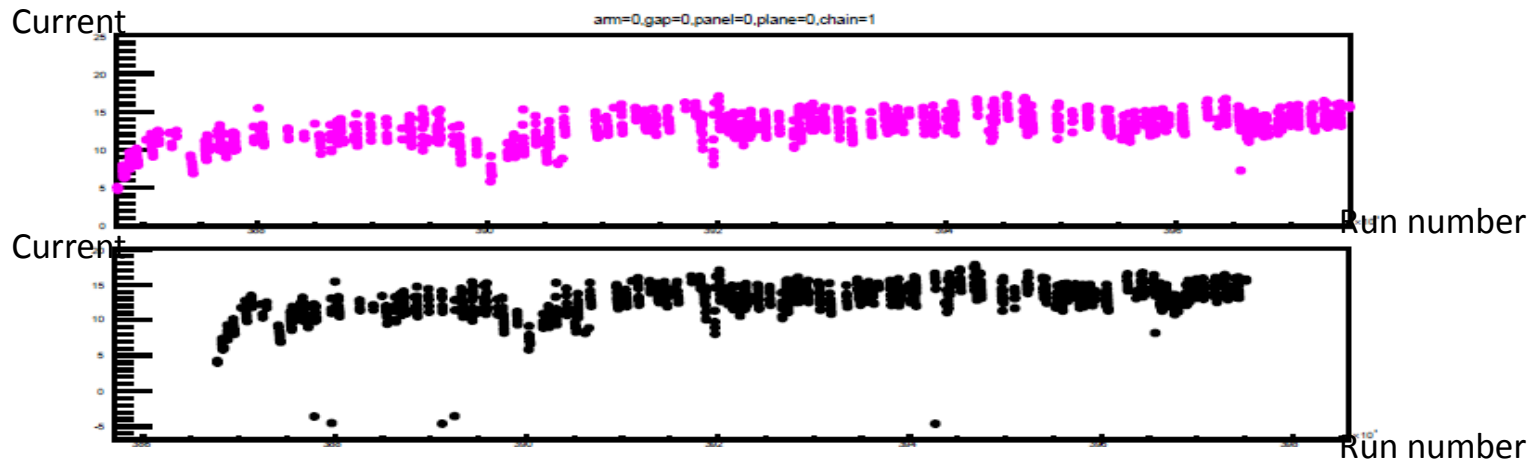
Comparing HV and data-driven methods

- The HV method's calculated efficiency considerably drops when the luminosity gets higher when the data-driven method's efficiency stays relatively stable.
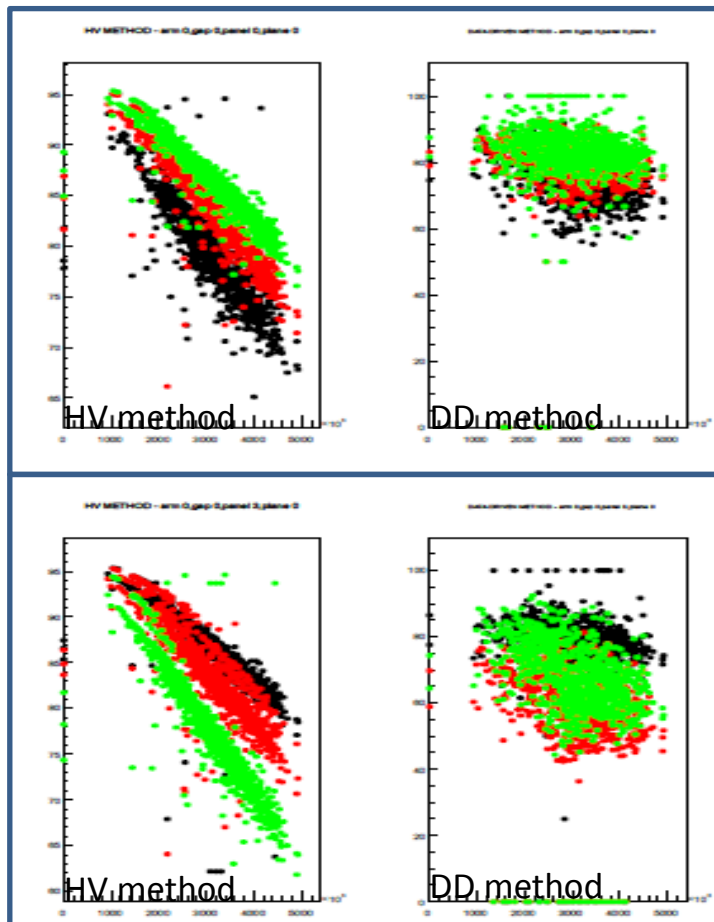
- In most cases both method agree on the group efficiency « order » per panel (here, black is the closest group from the beam line and green is the furthest)

- But there are 24/60 panels where this isn't the case.

Y : Efficiency
X : Luminosity